

ABSTRACT

The computer system presented comprises a data file having entries each designed to hold data, an advanced and a completed mapping file each having entries each designed to hold a data-file-entry address, a state-modification queue having entries each designed to hold substance of a modification made on the advanced mapping file, means for holding statuses of operations provided in respective correspondence with the entries of the state-modification queue, and a means for performing issued operations out of order. Making a modification on the advanced mapping file, entering the substance of this modification into the state-modification queue, and issuing operations are each to be done in one cycle. Each issued operation is to be executed out of order. And, if it is terminated normally, the corresponding part of the means for holding statuses of operations is to be altered accordingly. The system can attain high performance easily and utilize programs described in any machine language for traditional register-based/stack-based processors.